

CLAIMS

1. A method for obtaining a recording pulse parameter that is a method for reading standard recording pulse parameters from a writable optical disc to which are prerecorded standard recording pulse parameters defining recording pulse position information for each of plural mark length and space length combinations, correcting a standard recording pulse parameter, and obtaining a best recording pulse parameter, said method:
 - 10 performing a first test write to the optical disc using position information for all mark length and space length combinations in the standard recording pulse parameters;
 - 15 reproducing the first test write and detecting a first jitter from the reproduced signal;
 - 20 adding a first specific amount of change uniformly to the position information for all mark length and space length combinations in the standard recording pulse parameters, and performing a second test write to the optical disc using the uniformly changed position information;
 - 25 reproducing the second test write and detecting a second jitter from the reproduced signal; and
 - comparing the first jitter and second jitter, and
 - selecting the position information used for the test write

with less jitter.

2. A method for obtaining a recording pulse parameter as described in claim 1, said method further:

5 adding a second specific amount of change uniformly to the position information for all mark length and space length combinations in the standard recording pulse parameters, and performing a third test write to the optical disc using the uniformly changed position information;

10 reproducing the third test write and detecting a third jitter from the reproduced signal; and

comparing the first jitter, second jitter, and third jitter, and selecting the position information used for the test write with least jitter.

15 3. A method for obtaining a recording pulse parameter that is a method for reading standard recording pulse parameters from a writable optical disc to which are prerecorded standard recording pulse parameters defining recording pulse position information for each of plural possible mark length and space length combinations, correcting a standard recording pulse parameter, and obtaining a best recording pulse parameter, said method:

20 performing a first test write to the optical disc
25 using position information for any one combination selected

from all mark length and space length combinations in the standard recording pulse parameters;

reproducing the first test write and detecting a first jitter from the reproduced signal;

5 adding a first specific amount of change to the position information for the above one combination selected from all mark length and space length combinations in the standard recording pulse parameters, and performing a second test write to the optical disc using the changed
10 position information;

reproducing the second test write and detecting a second jitter from the reproduced signal; and

15 comparing the first jitter and second jitter, and selecting the position information used for the test write with less jitter.

4. A method for obtaining a recording pulse parameter as described in claim 3, said method further:

20 adding a second specific amount of change to the position information for the above one combination selected from all mark length and space length combinations in the standard recording pulse parameters, and performing a third test write to the optical disc using the changed a
position information;

25 reproducing the third test write and detecting a

third jitter from the reproduced signal; and

comparing the first jitter, second jitter, and third jitter, and selecting the position information used for the test write with least jitter.

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5. A method for obtaining a recording pulse parameter as described in claim 3, wherein when there is first position information selected for any one combination, and second position information selected for a separate 10 combination, position information intermediately between the two combinations is obtained by interpolation from the first position information and the second position information.

15 6. An apparatus for obtaining a recording pulse parameter that is an apparatus for reading standard recording pulse parameters from a writable optical disc to which are prerecorded standard recording pulse parameters defining recording pulse position information for each of 20 plural possible mark length and space length combinations, correcting a standard recording pulse parameter, and obtaining a best recording pulse parameter, said apparatus comprising:

25 a test writing means for performing a first test write to the optical disc using position information for all

mark length and space length combinations in the standard recording pulse parameters,

5 a jitter detection means for reproducing the first test write and detecting a first jitter from the reproduced signal,

the test writing means adding a first specific amount of change uniformly to the position information for all mark length and space length combinations in the standard recording pulse parameters, and performing a 10 second test write to the optical disc using the uniformly changed position information, and

the jitter detection means reproducing the second test write and detecting a second jitter from the reproduced signal, and

15 a selection means for comparing the first jitter and second jitter, and selecting the position information used for the test write with less jitter.

7. An apparatus for obtaining a recording pulse 20 parameter as described in claim 6, wherein:

the test writing means further adds a second specific amount of change uniformly to the position information for all mark length and space length combinations in the standard recording pulse parameters, 25 and performs a third test write to the optical disc using the

uniformly changed position information;

the jitter detection means reproduces the third test write and detects a third jitter from the reproduced signal; and

5 the selection means compares the first jitter, second jitter, and third jitter, and selects the position information used for the test write with least jitter.

8. An apparatus for obtaining a recording pulse parameter that is an apparatus for reading standard recording pulse parameters from a writable optical disc to which are prerecorded standard recording pulse parameters defining recording pulse position information for each of plural possible mark length and space length combinations, 10 correcting a standard recording pulse parameter, and obtaining a best recording pulse parameter, said apparatus comprising:

a test writing means for performing a first test write to the optical disc using position information for any 20 one combination selected from all mark length and space length combinations in the standard recording pulse parameters,

a jitter detection means for reproducing the first test write and detecting a first jitter from the reproduced 25 signal,

the test writing means adding a first specific amount of change to the position information for the above one combination selected from all mark length and space length combinations in the standard recording pulse 5 parameters, and performing a second test write to the optical disc using the changed position information, and

the jitter detection means reproducing the second test write and detecting a second jitter from the reproduced signal, and

10 a selection means for comparing the first jitter and second jitter, and selecting the position information used for the test write with less jitter.

9. An apparatus for obtaining a recording pulse 15 parameter as described in claim 8, wherein:

the test writing means adds a second specific amount of change to the position information for the above one combination selected from all mark length and space length combinations in the standard recording pulse 20 parameters, and performs a third test write to the optical disc using the changed position information;

the jitter detection means reproduces the third test write and detects a third jitter from the reproduced signal; and

25 the selection means compares the first jitter,

second jitter, and third jitter, and selects the position information used for the test write with least jitter.

10. An apparatus for obtaining a recording pulse parameter as described in claim 8, wherein when there is 5 first position information selected for any one combination, and second position information selected for a separate combination, position information intermediately between the two combinations is obtained by interpolation from the 10 first position information and the second position information.